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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,544	08/29/2001	Joun Ho Lee	8733.497.00	4753
30827	7590	09/21/2004	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			RAO, SHRINIVAS H	
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/940,544

**Applicant(s)**

LEE, JOUN HO

**Examiner**

Steven H. Rao

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11 and 20-27 is/are pending in the application.
- 4a) Of the above claim(s) 12-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-9, 11 and 20-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***DETAILED ACTION***

***Priority***

Receipt is acknowledged of paper submitted under 37 CFR 1.114 claiming priority from U.S. Serial No. 09/940544 filed on August 29, 2001 which itself claims priority from Korean Patent Application No. 2000-50773 filed on August 30, 2000 under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Continued Prosecution Application***

The request filed on September 03, 2004 for a Request for Continued Prosecution Examination (RCE) under 37 CFR 1.114(d) based on parent Application No. 09/940544 is acceptable and a RCE has been established. An action on the RCE follows.

***Information Disclosure Statement***

No further IDS after those filed on October 04, 2001 and May 08, 2003 have been filed .

***Preliminary Amendment Status***

Acknowledgment is made of entry of preliminary amendment filed June 24, 2004 i.e. the amendment after Final has been entered upon entering the RCE.

Therefore claim 1 as amended by the amendment and claims 2-9 as anmd 11 as recited in the amendment and presently newly added claims 20-27 are currently pending in the Application.

Claims 12-19 have been with drawn.

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Claim 10 has been cancelled.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 11 and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama et al. ( U.S. Patent No. 6,144,435, herein after Yokoyama) as previously applied and in view of Zhang et al. ( U.S. Patent No. 5,956,009 or 6,175,348, herein after Zhang, in the rejection below reference will be made only to 6,175,348 for the sake of convenience).

With respect to claims 1 and 20, Yokoyama describes an in plane switching mode liquid crystal display device comprising: first and second substrates (Yokoyama et al. fig. 3 1a and b, col. 6 line 32); a liquid crystal layer between the first and second substrates (Yokoyama fig.3 # 13, col. 6 line 41); gate and data lines arranged to cross each other on the first substrate; to define a plurality of pixel regions ( Yokoyama figs. 8 to 10)a plurality of common electrodes and data electrodes for applying an electric field to the liquid crystal layer that is parallel to the first substrate (Yokoyama figure 3 ,6,7 etc., col. 6 line 37) ;

Yokoyama does not specifically describe the newly added limitations of at least one dummy pattern overlapping at least one portion of the data lines and wherein a

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portion of the data lines overlapped with the dummy pattern is electrically connected to the dummy pattern.

However Zhang a patent from the same filed of endeavor, namely Liquid crystal displays and improvements in the configuration of an active matrix display, in claim1 last clause etc. describes at least one dummy pattern overlapping at least one portion of the data lines to average out conductor resistance and parasitic capacitances of the conducting lines that supply image data items, so as to compensate for variations in loss of signal traveling over the bus lines, the better more uniform images can be displayed.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Zhang's one dummy pattern overlapping at least one portion of the data lines in Yokoyama's device. The motivation to make the above inclusion is to average out conductor resistance and parasitic capacitances of the conducting lines that supply image data items, so as to compensate for variations in loss of signal traveling over the bus lines, the better more uniform images can be displayed. ( Zhang col.4 lines 5-10, col. 3 lines 25-35, etc.).

The last limitation of claim 1 :

wherein a portion of the data lines overlapped with the dummy pattern is electrically connected to the dummy pattern. ( Zhang col. 3 lines 35-52).

The recitation, " for applying an electric field to the liquid crystal layer that is parallel to the first substrate " is taken to a product by process limitation and not given patentable weight. A product by process claim is directed to the product per se, ( i.e.

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common and data electrodes) no matter how actually made . See *In re Fessman*, 180 USPQ 324, 326 ( CCPA 1974) ; *In re Marosi et al.* 218 USPQ 289, 292 ( Fed. Cir. 1983) and particularly *In re Thrope* , 227 USPQ 964, 966 ( Fed. Cir. 1985), all of which make it clear that it is the patentability of the final structure of the product “ gleaned” from the process steps, which must be determined in a “ product by process” claim, and not the patentability of the process. See also MPEP 2113. More ever , an old or obvious product produced by a new method is not a patentable product, whether claimed in “ product by process” claims or not. ( similar to the previous rejection mailed 05/03/03 wherein patentable weight was not given to the phrase” for applying an electric field parallel to the first substrate within a pixel region defined by the gate and data lines).

Assuming Applicants’ argue that the above recitation “ for applying an electric field parallel to the first substrate to the liquid crystal layer “ recites the use for the common and data electrodes , it is also well settled law that intended use does not differentiate from the prior art. See *Ex parte Masham.*, 2USPQ 1647 ( 1987).

The remaining limitations of claim 20 :

wherein the dummy pattern is integral with at least one of the common electrodes.( *Yakoyama* fig. 13 A # 41 ,31).

, wherein a portion of at least one of the common electrodes integral with the dummy pattern is electrically insulated from the common line. ( *Yokoyama* figure 29).

With respect to claim 2 and 21 *Yokoyama* describes the device as claimed in claim 1, further comprising a gate insulating film between the data line and the dummy pattern. ( *Yokoyama* figure 3 # 5, col. 9 lines 20-27).

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With respect to claim 3 and 22, Yokoyama describes the device as claimed in claim 1, wherein the dummy pattern overlaps first and second portions of the data line. ((Zhang claim 1 and col.4 lines 5-10, col. 3 lines 25-35, etc.).

With respect to claim 4 and 23 Yokoyama describes the device as claimed in claim 1, wherein the dummy pattern is integral with at least one of the common electrodes.( Yakoyama fig. 13 A # 41 ,31).

With respect to claim 5 Yokoyama describes the device as claimed in claim 1, wherein the dummy pattern includes a material the same as that of the common electrode. ( Yakoyama col.10 lines 6-7).

With respect to claims 6, 7 and 25 Yokoyama describes the device as claimed in claim 1, wherein the dummy pattern includes a transparent conductive material. (Yokoyama col. 10 lines 6-7 and col. 9 lines 36-37-ITO).

With respect to claims 8 and 26Yokoyama describes the device as claimed in claim 1, further comprising a common line in parallel to the gate lines. (Yokoyama fig. 13 A)

With respect to claims 9 and 27Yokoyama describes the device as claimed in claim 8, wherein the common line is electrically connected with the plurality of common electrodes. (Yokoyama figure 27).

With respect to claim 10 Yokoyama describes the device as claimed in claim 1, wherein the dummy pattern overlapping portion of the data line is electrically connected with the dummy pattern. ( Zhang claim 1 and col.4 lines 5-10, col. 3 lines 25-35, etc.)..

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With respect to claim 11 to the extent understood Yokoyama describes the device as claimed in claim 4, wherein a portion of at least one of the common electrodes integral with the dummy pattern is electrically insulated from the common line. ( Yokoyama figure 29).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-9, and 11 have been considered but are moot in view of the new ground(s) of rejection.

Dependent claims 2-11 were alleged to be allowable because of their dependency from allegedly allowable claim 1.

However as shown above claim 1 is not allowable. Therefore claims 2-11 are also not allowable.

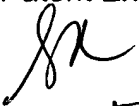
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H. Rao whose telephone number is (571) 272-1718. The examiner can normally be reached on 8.00 to 5.00.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 3067722.

Steven H. Rao

Patent Examiner

  
9/14/2004

  
LONG PHAM  
PRIMARY EXAMINER